

Table of Contents

3. Command Team

4. What is the 75th Ranger Regiment?

5. Ranger Communications: A Brief History

Signal Corps: Evolution into 2030

12. The Innovation of Bold Risks

15. The 75th's Tactical Mission Network

18. Warrant Officer Spotlight: CW2 Clinton Guild

19. SBOLC Pre-Ranger Program

22. Want to hear more about Signal Innovation?

23. Q&A with Staff Sgt. Stevin Johnson

24. Interested in serving as a Communicator in the 75th Ranger Regiment?

The Army Communicator is published as a command information e-publication for the men and women of the United States Army Signal Corps under the provisions of AR 360-1.

Opinions expressed herein do not necessarily reflect the views of Office, Chief of Signal, the US Army or the Department of Defense.

Submit articles, photos, graphics, videos, story ideas, and nominations for "Signal Spotlight" to the editor <u>here</u>. For additional information, please call (706) 791-7384.

Follow the Signal Regiment on Facebook <u>here</u>. Follow the Signal School Commandant on Twitter <u>here</u>.

Col. John T. Batson Signal School Commandant

Command Sgt. Maj. Darien D. Lawshea Signal Corps Regimental Command Sergeant Major

CW5 Garth R. Hahn Signal Corps Regimental Chief Warrant Officer

Nicholas M. Spinelli Editor-in-Chief

1st Lt. Geoff Logan Guest Editor

On the Cover

Rangers participate in a Field Training Exercise. Photo provided by 75th Ranger Regiment Public Affairs



Signal Regimental Team

Welcome to the April edition of the *Army Communicator*! We're incredibly excited about this issue, the content for which has been entirely provided by the 75th Ranger Regiment!

In the *Army Communicator*, we attempt to highlight some of the different opportunities and assignments available to our Signaleers. This includes highlighting some of the offered developmental assignments through our MPEP and TWI programs to instructor positions here at the school house.

It's no secret that there is a mystique surrounding opportunities that exist within the special operations community. In this issue, you'll get an in depth look into the world of that community from the eyes of communicators within the 75th Ranger Regiment. You'll read about some of the history of communications within the Regiment, what the Regiment is currently doing with today's latest communications technologies, and what the future of Signal operations is looking like. You'll also learn about the steps you need to take if you're interested in being a part of this unit's storied history.

Before we get into all of that, however, let's take a moment to focus on an important issue that the Army and sister services of the Department of Defense is facing. Recently, the Signal School took part in a stand down focusing on extremism. Against our values and the very concepts of good order and discipline that we stand for, the Army is seeing an increase in concerning behavior.

Extremist behavior is a threat to the safety of our Soldiers, civilians, and our entire profession of arms. What we say and do does not just reflect on us, but on the entirety of the Army. We need to remember that we are ambassadors and must conduct ourselves accordingly. The Army's guidance on extremist organizations is outlined within AR 600-20. We have a policy of, "see something, say something," in regards to insider threats and harassment. Let's apply that mentality to extremism as well. If you witness concerning patterns or behavior, you may report activities using iSALUTE, and iWATCH, in addition to notifying their Chain of Command and Army law enforcement.

CSM Lawshea, CW5 Hahn and I would like to thank you again for joining us here. We hope you enjoy the issue and until next month, Pro Patria Vigilans!



COL John T. Batson Signal School Commandant



CSM Darien D. Lawshea Regimental CSM



CW5 Garth R. Hahn Regimental CWO

What is the 75th Ranger Regiment?

75th Ranger Regiment Public Affairs

The 75th Ranger Regiment is a unique Special Operations Force com- execute surgical Special Operations prised of specially selected and well trained Soldiers constantly tested for the privilege of serving in our Regiment.

Our four-time volunteer force provides our Nation a range of capabilities not found in any other Special Op-

erations or Conventional Force. Simul- our Nation's wars. taneously, we conduct large-scale Joint Forcible Entry Operations and Raids around the globe in high-risk, uncertain, and politically sensitive areas.

As standard-bearers for discipline and excellence, our Regiment migrates leaders throughout the Operational Force to enable our Army to win

We lead the way for readiness advancements connecting Special Operations to Conventional Forces. We are loyal to our Regiment, the Army, and our Nation. We live the Ranger Creed We honor the sacrifices of our Rangers and their families by fostering life-long relationships that support the success of our Rangers.



Photo by 75th Ranger Regiment Recruiting Detachment

Ranger Communications: A Brief History

Sgt. Maj. Jason Walker 75th Ranger Regiment RS6 Sergeant Major

The US Army can trace the history of the modern-day Ranger Communicator back as far as the American Revolution. Rangers have always needed an efficient and effective way to communicate between individuals and elements on the battlefield. Although a long history exists, the Army first adopted the modern-day Ranger communications capability with the 1st Ranger Battalion's activation in 1974. Early on, Signal Rangers had to carry heavy equipment that often served a single purpose and provided only basic tactical communications in the combat formations. Operations such as Urgent Fury introduced more advanced equipment such as the AN/PRC-



Ranger Regiment Airborne Operation from the mid-1980's, Photo by 75th anger Regiment Public Affairs

77 tactical radio, and KY-57 encryption device; during Operation Just Cause in Panama, the LST-5 made its debut making Tactical Satellite (TACSAT) Communications possible.

Regardless of the conflict, Ranger com-

municators have provided critical communications on the battlefield. Many of these Ranger's careers span several conflicts; they have often become very influential members of the Special Operations community and now serve in other Army Senior leader positions. Some of the more notable names that are still serving today include: BG Jeth Rev (CENTCOM CJ6) is the only Signal Ranger to serve as a Soldier, NCO, Warrant, and Commissioned officer in the Regiment. BG Rey was recently selected to serve as the next Director of the Network-Cross Functional Team. Sgt. Maj. Jack Nichols (Army G6 SEA) spent his early career as a Ranger before moving through the Special Operations Community. Sqt. Maj. Nichols was recently selected to serve as the next CSM of Army Cyber Command. CW5 Taylor Wells (Senior Technical Advisor to the DISA Director) spent most of his Warrant Officer career serving the Ranger Regiment and spearheaded the Regiment's technological advancement in the early years of the Global War on Terror. Command Sgt. Maj. Darien Lawshea, who as a young NCO moved through the ranks of the Ranger Regiment, finishing his time as a Battalion Communications Chief and Signal Force Modernization Manager.

These leaders in addition to others, ability over the last 20 plus years to influence the Ranger Regiment and the greater Army highlights the Regiment's Charter of sending capable combat-tested leaders back into the larger force. Regardless of the conflict, Rangers like those mentioned here were responsible for some of the Ranger Regiment's most notable achievements and spearheaded some of the most critical missions.

Signal Corps: Evolution into 2030

Maj Tim Lawrence and Staff Sgt. Colin Eldred 75th Ranger Regiment RS6

The United States Army is at the dawn of a revolutionary period in communications. Arguably, this period will be more dynamic than in any other era in the Signal Corps history. Signal leaders must analyze, strategize, and prepare the force by taking action now to enable enduring success by 2030. Endeavors such as the Army's adoption of Low Earth Orbit (LEO) satellites, networked radios providing edge capabilities, cloud infrastructure, and Machine Learning (ML) best practices are rapidly maturing to enable Mission Command as a Service (MCaaS). The 75th Ranger Regiment is chartered to evaluate emerging technology and articulate lessons learned, our efforts with Defense Advanced Research Projects Agency (DARPA), and Army-wide elements such as the Network-Cross Functional Team will lead and enable the Army's future communications success.

We serve in a period of rapid technological change; our mission is shifting from 20 years of counter-terrorism to global competition with peer adversaries. Our networks must become adaptive, agile, and resilient to compete and win in large-scale combat operations. This article will cover a variety of concepts; however, it intentionally omits topics related to cybersecurity and the contested communications environment.

Some of the major drivers of change in the next ten years include:

Low Earth Orbit: satellites will drastically change



A Ranger uses his EUD during a mission.

Photo by 75th Ranger Regiment Public Affairs

the future of warfare.

- -LEO constellations will be a feasible alternative to terrestrial networks providing high-throughput speeds to the tactical edge.
- -Electronically Steerable Array (ESA) terminals vice parabolic dishes will become the norm across the Army's tactical footprint due to ease of use and LEO compatibility.

Tactical Networks:

- -Tactical Mission Network interoperability will play a vital role.
- -The complexity of multiple networks will be a challenge.
- -Command posts must be agile, the current footprint limits tactical mobility.
- -The common operational picture (COP) must be scalable and customizable.

Machine Learning:

- -ML capabilities must be understood across the force and drive the commander's decision making process.
- -Cloud and edge computing enable ML.

Mission Command as a Service:

- -MCaaS will achieve rapid employment of Mission Command on a global level.
- -Convergence of Cloud, ML, and C2 Capabilities at Scale.
- -Capability to provide different user interfaces to the Ranger on the ground or the command post from the same digital infrastructure.

People First:

- -Invest heavily in expert training of our people and infrastructure to meet expectations.
- -Technology is outpacing our ability to integrate the technology; strategy and culture must adopt a "fail fast" mindset.

Low Earth Orbit:

3G cellular service in 2010 was the last time most people can definitively say their smartphones lacked sufficient speed. Tactical communications are only now beginning to close the gap on network speeds and advancements. LEO satellite and flat-panel ESA terminals are coming online with increased capability and throughput. The movement to a "LEO first" approach is a cornerstone to a 2030 end-state because research and development efforts (R&D) will usher in an era of hyperenabled and interoperable Soldiers.

The outcomes of these R&D efforts should include man-packable Beyond Line of Sight (BLOS) antennas, all-in-one End User Devices (EUD) with integrated Mobile AdHoc Network (MANET) capabilities, and vendoragnostic waveforms.

The Signal Corps has a long history of taking military vehicles and incorporating communication systems to allow for a mobile command & control (C2) node. With LEO constellations coming online, Super High Frequen-



Artist's Rendition of a LEO Constellation Graphic courtesy of Texas Instruments

cy (SHF) terminals can come in reduced form factors leading to a wider variety of more mobile communications vehicles. However, the future of communications should not have to dedicate any vehicle to supporting the C2 function. By 2030, we need a modular comms package that rapidly pairs with any vehicle that returns to dismounted operations at a moment's notice.

Why is LEO accelerating change?

- -For the first time, the bottleneck is no longer throughput. API developers are now designing in an environment without the confines of throughput.
- -Reduced latency allows for remote capabilities that previously were only possible on terrestrial and commercial networks.
- -Tactical edge can now mirror the garrison environment without introducing massive logistical challenges.
- -Application developers must unlearn the bandwidth-constrained environment rules.



Rangers use Tactical Mission Network-Connected-Radios During Training,
Photo by 75th Ranger Regiment Public Affairs

Tactical Networks:

The 75th Ranger Regiment employs a Tactical Mission Network, which provides global mission command stretching from the tactical edge to the Joint Task Force Commander. This capability connects the lower tier and upper tier directly to the Wide Area Network (WAN). A Tactical Mission Network protects other DOD networks from compromise, provides flexibility, increases situational awareness (SA), enables both the accuracy and timeliness of tactical decisions and hyper-enables Rangers on the ground. The 75th Ranger Regiment's Tactical Mission Network provides technical overmatch while posturing Rangers and the Army for Large Scale Ground Combat Operations.

Rangers can now reference the entire concept of an operation at a moment's notice without relying solely on memory through the inclusion of MANET radio networks and kit-mounted COP displays called EUDs. Some of the most impactful capabilities that have come from this modernization are:

- -Situational awareness is shared at the same level of a fixed command post from the Ground Force Commander through Team Leaders.
- -Fire and effects are fast and dynamic, air-to-ground synchronizes in real-time, and persistent chat increases understanding across the battlespace.
- -EUDs enable Rangers to focus on the task at hand, which equates to more maneuver decisions per/minute.
- -Cross-Domain Solution (CDS) integration problems must be resolved; this step is critical to increasing independent networks.

Machine Learning:

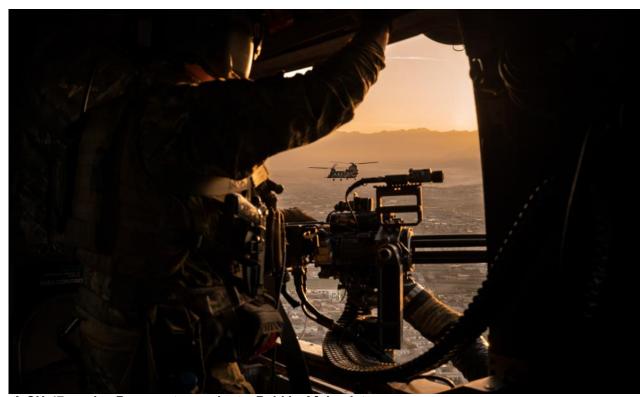
Presumably, this article's average reader has never witnessed how ML capabilities are rapidly enhancing the way the Army fights. That is not the fault of the reader,

but rather a gap exists in informing our formations and commanders. At its core, ML is about tasking a computer to analyze information to recognize patterns; silhouette, facial, and voice recognition software are all examples of ML. Any information type can be analyzed for a desired pattern, but ML is utterly dependent on the information it analyzes. ML will quickly filter massive amounts of data and only provide the information relevant to the commander's decision-making process.

To get the most out of ML, the Army must work closely with Federally Funded Research and Development Centers (FFRDCs) to ensure interoperability in ML systems. This effort will ensure the information created or recorded across the DoD is accurate and labeled in a way that algorithms can understand.

MCaaS:

Mission Command is the Army's approach to command and control that empowers subordinate decision-making and decentralized execution appropriate to the situation. Complementary to that effort is a philosophy the authors of this article created to encapsulate the overarching tenants in the future of communications in 2030 - Mission Command as a Service (MCaaS). MCaaS unifies the



A CH-47 carries Rangers to conduct a Raid in Afghanistan. Photo by 75th Ranger Regiment Public Affairs

battlefield with the command post in real-time, automatically incorporating information, sensors, and automating staff processes while eliminating the need to establish a physical network infrastructure on the ground.

The objectives associated with Mission Command as a Service in terms of communication are to reduce the challenges of rapid deployment, scalability, and decision fatigue. MCaaS will leverage LEO satellites in conjunction with Cloud and ML capabilities at the edge.

MCaaS will provide Soldiers and Leaders with pertinent information through a reliable means without distracting from a Soldier's tactical tasks with irrelevant information. The 2030 Joint Operations Center (JOC), established digitally vice-logistically and globally on-demand, is the goal. The balance of talent, infrastructure, logistics, and preparation are the core components of providing mission command at scale and as a service. The enhancement of these components through the addition of



Rangers use Tactical Mission Network for communications during an Field Training Exercise. Photo by 75th Ranger Regiment Public Affairs

more capable transport, locationagnostic cloud infrastructure, investment in training, and the processing capabilities of ML allow the Army to codify MCaaS's role in Mission Command. MCaaS will be made possible by leveraging the following technological advancements:

-The transition from majority of onsite Army controlled data centers to a

hybrid including cloud based Infrastructure as a Service (IaaS).

-Infrastructure as Code (IaC) – The ability to establish/teardown MCaaS at a moment's notice through automated configuration.

-A Tactical Mission Network pushes containerized services (chat, Full Motion Video, Radio over IP (RoIP), Position Location Information). -Enables Mission Command at Scale by providing the right resources and information on-demand to enable overmatch.

-MCaaS can deliver the appropriate COP and C2 services ranging from the target objective to the JOC.

People First:

Recruitment, retention, and management will always play a critical role within the Signal Corps. Communication systems for the end-users have become simpler to operate out of the box; however, networks and systems administration has become vastly more complex. As a result, Signal Corps leaders should develop appropriate strategies to offset raised expectations. These expectations will inherently require a higher degree of talent and training to achieve. Some of the challenges the Signal Corps must address include:

-Technology will continue to evolve quicker than the Army can introduce; 50th ESB-E like evaluations should continue to exist but optimized. Evaluations should not take longer than -12 months; the Army must be willing to fail fast and continue forward. -Networking and software APIs must become the keystones of Signal training in AIT and PME courses to track the flight path of technological progression.



Rangers prepare to load and conduct Night Time Operations
Photo by 75th Ranger Regiment Public Affairs

- -The commercial sectors growing requirement for talented and experienced Army communicators will increase the challenges of retention.
- -The lifecycle of communications equipment will shrink due to the pace of advancement; establishing a Signal Corps logistics Military Operational Specialty (MOS) will be essential to keep pace.
- -The inability to maintain sufficient quantities of 255 Signal Warrant Officers is a gap that currently requires contractors/FSR's to offset. A possible solution would evaluate Non-Commissioned Officers based on their technical competency and evaluations resulting in direct appointment to the grade of Warrant Officer 1.

As the Army moves into the next generation of warfare, it will be unable to ignore that the technical revolution currently occurring across the Signal Regiment is more robust and dynamic than in any other era in the U.S. Army's history. The 75th Ranger Regiment is leading the way in the acquisition, testing, use, and lessons learned of this technical revolution. Signal leaders will be the voice of innovation and technological change in their formations, and they must analyze, strategize, and prepare the path ahead taking action now that will enable enduring success by 2030.

The Innovation of Bold Risks

Cpt. Jordan Orechwa BN S6 at 2nd Battalion, 75th Ranger Regiment

Innovation is tough. There is no textbook answer or list of steps that exist to help someone innovate. If we look at historical examples of innovation, it's hard to pin down the one root cause of innovative success. There are a lot of variables at play. That being said, with any good aggregation of data, there exist common denominators and trends that present themselves through iterations (2nd Ranger Battalion has been innovating for a long time and will continue to do so). Innovation is necessary for us to maintain the advantage, and from a communication perspective, to ensure that our mission command abilities are at the cutting edge. We've identified some common trends, including an overarching cul-



Photo by 75th Ranger Regiment Public Affairs

ture of innovation comprised of bold ideas, a healthy acceptance of failure, a culture of experimentation, humility, and a relentless pursuit of goals. It's never just one person, and you have to be willing to "send it".

Bold ideas can often make or break an innovative effort. They can allow you to move outside of the status quo. Without bold steps, efforts tend to fall in line with the previous iterations, and the effort reaches the same endstate as before. One example exists in the efforts made by CW2 Dillon Adams to create a PRC-163 TSM network deployable at scale.

Our problem was that our current Mobile Ad-hoc Network (MANET) deployments with the PRC-163 on TSM would crash around 60 to 100 users using a single center frequency. Dillon's idea was to divide the available spectrum into four center frequencies to alleviate the stress on any one center frequency. This idea was bold for two reasons. First, this division would consume the entirety of the radio's operating spectrum for TSM; to consume the entire spectrum of VHF we would have around 3,000 dedicated frequencies. Second, these four center frequencies would require a physical point of convergence, or else the elements on different frequencies would not be able to cross-communicate and share data. In short, to execute Dillon's plan, we were required to consume an entire block of the spectrum and develop a physical convergence point that could deploy onto a battlefield. It was bold.

Without this concept, we would be relegated to slowly iterating and making cuts, such as reducing nodes on the network or regulating traffic that passes through the network. Though this concept is very effective and our

implementation was successful, we had to iterate through failure before we got to that point.

In a culture of innovation, failure through iterative experimentation is always expected. To fail once is acceptable. To fail twice for the same reason is less so. If failure is entirely unacceptable, then calculated risks can never be taken, and things can't improve. The first iteration of the aforementioned MANET plan didn't work - This failure occurred during a battalion-level deployment VALEX. A similar issue happened while deployed. During the exercise, the multi -frequency MANET was deployed with two convergence points. The failure occurred when the two convergence points were too close in proximity to each other. This interference created a broadcast storm that completely crashed the MANET. We were unable to execute as planned.

The exercise went on with the MANET's constant resets, but it was obvious that something had to be fixed. Although this failure was disappointing initially, it provided an incredible opportunity to learn and showed us problems that we couldn't have anticipated otherwise. This combination of executing a bold idea and iterating through failure resulted in a TTP that, to our knowledge, is the only

way to deploy TSM MANET at scale, which is very important because a Battalion that can't communicate with the newest technology is behind the curve.

Finally, innovation can only occur with a degree of humility and a relentless pursuit of goals. Humility is key because it

gives room for feedback to process, allows plans to change, and identifies problems. Being relentless in pursuing goals allows an individual to react, bypass, and work through the inevitable roadblocks that will occur. 2D Ranger Battalion recently executed a proved mission command. Multi-Lateral Airborne Training (MLAT) event where we were able to employ the Starlink LEO constellation as our primary transport from the objective. It was fantastic; high-speeds, low-latency, non-equatorial coverage, and quick signal acquisition were a great enhancement to our Beyond Line-of-Sight (BLOS) data backhaul abilities. Our unit first developed an appetite for Starlink/LEO during a



Photo by 75th Ranger Regiment Public Affairs

demo last year. Suddenly, with short notice, the implementation of Starlink was an innovative step we wanted to take for our MLAT exercise. We wanted to try something never attempted before to meet our end-state of im-

However, it was a bit of a scramble to get there. We instantly encountered concerns such as actual equipment availability, network coverage over our objective area, and whether we would receive support. The first Hail Mary was a cold call to SPACE-X during block leave a few days before Christmas, to which they responded favorably. The next step was to determine network coverage.



The Ground Force Commander conducts a video call from the Objective with a Starlink Terminal for Transport,. Photo by Cpt. Jordan Orechwa

After some back and forth, we solidified our date-time groups, and Starlink validated the target area supportability. Finally, we ironed out the logistics of equipment delivery. We validated the terminal two days before the exercise. Given we already had the ability to conduct BLOS data transport, any of the issues listed

above could have been an excuse to halt our efforts, alleviate the stress and move on with our original plan. But that's not our style, and a relentsary. It was worth it in the end.

Innovation is going to play a key role in our next event as well. Some may consider it back to basics,

but we'll employ HF battalion-wide for a complex training operation. Our requirements for data and persistent communication will still exist. It's takless pursuit of goals is entirely neces- en quite a bit of thought to determine how we'll crack this nut. Our plan is bold, we're prepared for a degree of failure, and we'll have to be relentless in our planning and execution.

The 75th's Tactical Mission Network

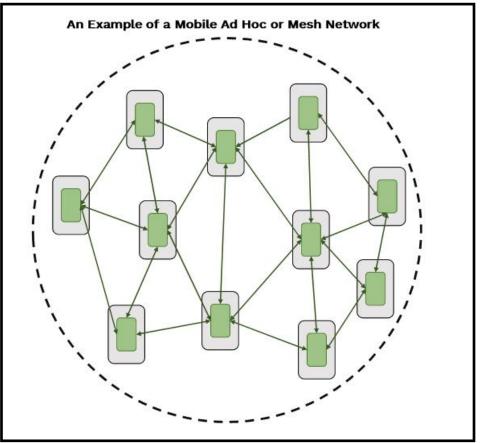
1st Lt. Geoff Logan 75th Ranger Regiment

Have you ever tried to make a call or send a text and realized you didn't have cell service? Have you ever wondered where your cell service comes from? How do millions of devices every year maintain an active connection continuously and simultaneously to service? These are all questions that involve **Networks**, which are the communication highways between devices, and they are of the utmost importance to the 75th Ranger Regiment. As warfare continues to evolve, units like the Ranger Regiment have identified communications needs that exceed line-of-sight radio communications, the bandwidth and cost limitations of satellite communications, or the latency of networks overburdened by data and imageryrich information. Networks used by the greater military often require specific security infrastructure and hardening to protect from data breaches and loss of sensitive information. Bringing enterprise secret networks to austere tactical environments is a poor security practice and carries high cost.

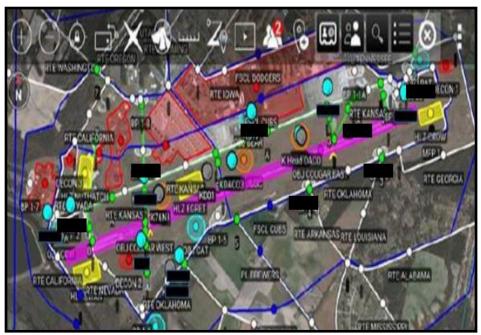
The need for a **Tactically Secure Network** uniquely tailored to the needs of units on the ground has only grown in recent years with an increase in the near-peer contested communications environment. The 75th Ranger Regiment strives to provide the most significant advantage possible for Rangers in combat and in training, and an increase in near-peer contested environments has further added pressure to Ranger Communicators' communications needs.

Tactical Mission Network (TMN) is the 75th Ranger Regiment's answer to communication issues at the

tactical edge, and the TMN capability answers the burgeoning needs of communications across the Regiment. TMN's design centers on a two-part cell-phone and radio connection system that works in technological tandem on a Ranger's field kit. This configuration then enables a two-fold advantage: 1) a local, **Mobile Ad Hoc Network**, or **MANET** (pronounced "man-ay") and 2) immediate and identifiable beyond line-of-sight communication capabilities to the Joint Operations Center and aviation assets overhead.



Graphic by 1st Lt. Geoff Logan



An End User Device Application using TMN. Photo by 75th Ranger Regiment S6



Photo by 75th Ranger Regiment Public Affairs

The MANET provides extreme flexibility with the ground fighting force and their enablers that are operating on target. A MANET is a self-healing and infrastructure-less network of End User Devices (EUD) connected without wires. It is resilient, and as traffic moves from point-to-point, the mesh network can move independently in any direction from device to device. The tactical network concept removes an incredible amount of risk from contamination and compromise of the 75th Ranger Regiment's enterprise networks. Current development of the Ranger Regiment's MANET capabilities are focused on improving bandwidth capabilities for network reliability. Ranger innovation exists in a Continuous Integration and Continuous Deployment (CI/CD) pipeline from bottom-up feedback through a Development, Security, and Operations cycle called Multilateral Airborne Training (MLAT) exercises.

Tangibly, TMN provides several advantages to the 75th Ranger Regiment. Due to TMN's particular architecture, a wide variety of information is shared continuously between the Joint Operations Center and the Ranger on the ground. Radio over IP (RoIP), Voice over IP (VoIP), chat, ISR Feeds, and Machine Learning (ML) are just a few of the consistently converging things within the network's architecture. A Ranger's Position Location Information data on the objective drastically reduces risk to force and re-energizes tactical decision-making at the highest levels in real-time. It is the spring-board for concrete innovation through partnerships with joint players and End-User-Devices. TMN's infrastructure and software enable innovation by Regiment's home-grown internal **Software Develop**ment Teams.

The 75th Ranger Regiment sees future TMN innovation through three separate lines of effort. The first is



Rangers use TMN to Command and Control During Night-Time Operations,. Photo by 75th Ranger Regiment Public Affairs

to build a technological coding playbook. The 75th Ranger Regiment assumes security risks every time a TMN is tactically employed, and continued software acquisition and programming efforts will hone Regiment's capability to automate burning and re-building TMN locally on demand. The second involves continued participation in ML research and integration. The intersection of data analysis, raw computing power, and mission command is continuing in leaps and bounds through ML platforms integrated into TMN's architecture. Lastly, the growing presence of privately-produced **Low-Earth-Orbit** and **Geostationary Orbit** satellite constellations has vastly improved global communications capabilities through

bandwidth. The 75th is in close partnership with the organizations on the cutting edge of those technological improvements.

The 75th Ranger Regiment's long-term end-state for Tactical Mission Network is for it to be as capable as a cell -phone is in your pocket: engaged in vast communications on the move and simultaneously catered to the specific needs of the end-user. As with all technology and innovation that the 75th pursues, the return on investment of their communications advancements continues to have significant positive impacts on the greater Army force and the US Military.

Warrant Officer Spotlight: CW2 Clinton Guild

Cpt. Joshua Eurell former RSTB BN S6

CW2 Clinton Guild, born and raised in Plano, Texas, enlisted in the United States Army in 2007 as a Signal Services Support Technician (25U). Besides Basic Training and Advanced Individual Training, he hasn't spent a day assigned to a unit outside of the 75th Ranger Regiment. After attending the Ranger Assessment and Selection Program 1 (RASP 1), CW2 Guild reported to 3rd Battalion, 75th Ranger Regiment at Fort Benning, Georgia. For nine deployments, he served as a Radio Telephone Operator and Company Communications Non-Commissioned Officer. It is his time and experiences from 3/75 that he looks back on most fondly, and when asked why, he responded, "I got to work for and with the best communicators in the DoD".

Eight years into his career, CW2 Guild was selected to become an Information Services Technician (255A), and upon completion of WOCS he returned to the 75th Ranger Regiment. He completed RASP 2 and reported to 1st Battalion, 75th Ranger Regiment. For the next four years and four deployments, CW2 Guild worked on countless lines of effort for his Battalion and the Regimental Signal community. Most notably, he played a decisive role in creating the 75th Ranger Regiment's Tactical Mission Network (TMN).

CW2 Guild currently serves as the Senior Signal Technician for the 75th Ranger Regiment, and is the Subject Matter Expert on all things TMN-related. He oversees the installation, operation, maintenance, and defense of all of the Regiment's Strategic and Tactical

communication systems. To find CW2 Guild's workspace, you need only look for a cubicle with hardware and cables spread out on the floor. This laboratory is where he fine-tunes Regimental capabilities and conducts experimental work of today, which will prevent tomorrow's Signal Corps' headaches. CW2 Guild is often overheard on the phone with his Enlisted, Warrant Officer, and Civilian counterparts discussing the myriad of

daily network problems that require his technical expertise and experience to solve. When he isn't working on engineering, innovation, and integration of TMN, CW2 Guild is busy thinking about how to solve the problems facing the Signal community at large: bringing strategic level services to the tactical edge, automation of networking systems, and increasing the depth of programming skills and awareness across the DoD



CW2 Clinton Guild

SBOLC Pre-Ranger Program



Pre-Ranger students participate in the Ranger Fitness Test. Photo by Lexi Thralls

Cpt. Joshua Varney SBOLC TAC and former RSTB Company Commander

On any given morning in Fort Gordon, you can find a small group of individuals giving everything they have for a chance to stand apart in the Signal Corps. Whether it is 35 degrees and raining, or 98 degrees with 100% humidity, these communicators are searching within themselves for the grit it takes to Lead The Way. They spend their time rucking with 55+ pound pack for an unknown amount of miles, running five miles before an intense gym session, or sleep-deprived in the woods conducting tactics and land navigation training. These men and

women are competing for an opportunity to attend the U.S. Army Ranger School, and for a select few from that population, a chance to assess for the 75th Ranger Regiment.

While Fort Gordon maintains Regiment liaisons tasked with an enlisted recruitment mission, there was no formal program for Officers until late 2019. With the arrival of a TAC Officer with previous experience as a Ranger Instructor and Signal Company Platoon Leader, Executive Officer, and Commander in the 75th RSTB, the Senior Leader Development College (SLDC) targeted the opportunity to initiate a Pre-Ranger Program housed within the Signal Basic Officer Leader Course







(SBOLC). With the assistance of his Non-Commissioned Officers, SFC Lewis and SFC Lesner, CPT Joshua Varney developed and executed the first Pre-Ranger Program starting January 2020.

Since then, the program has conducted five full phases despite the limitations and constraints of the COVID-19 pandemic. Though some parts of the program have been adjusted and training is most often



Pre-Ranger students participate in the Ranger Fitness Test and Combat Water Survival Test.
Photos by Lexi Thralls

conducted in small teams of six, it has not deterred it nor prevented several Signal Officers from meeting the standards. The program has trained and assessed students of SBOLC, Cyber BOLC, Signal Captains Career Course, and permanent party Soldiers.

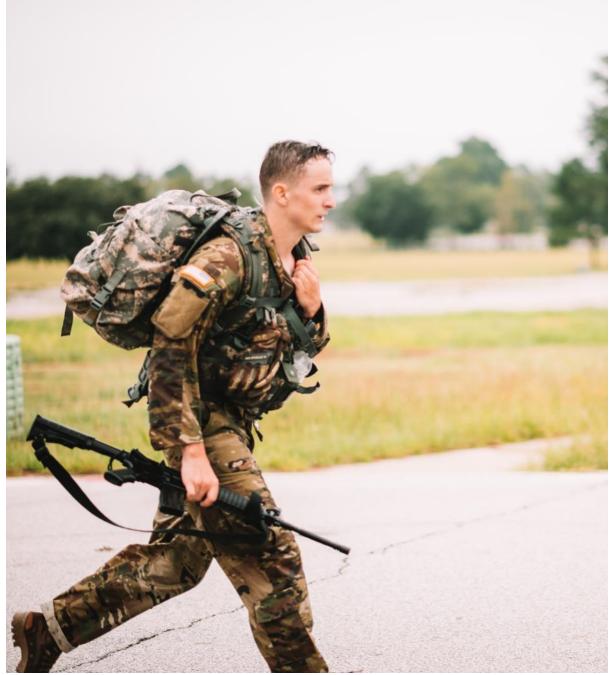
The program consists of an initial assessment including the Ranger Physical Fitness Test, Combat Water Survival Assessment, and a 12-mile foot march. Once complete, a physical training plan is developed for the remaining candidates, emphasizing Ranger School as the goal. Despite the program's competitive nature, it puts a great deal of emphasis on the "team" concept requiring all physical training to be conducted in teams. Ranger School classes are taught weekly to get the candidates trained on small unit tactics.

the orders process, weapons, radios, and land navigation. Several Squad Training Exercises (STX) are conducted throughout the program, with a culminating event to determine Ranger School selectees. The program lasts approximately 12 weeks for each candidate, with several classes at different stages of the program running concurrently.

The program has trained approximately 100 students with 22 fully completing the training. Of those 22, seven have attended Ranger School, with three graduates and three currently attending at different phases. One of the three graduates has also completed the Ranger Selection and Assessment Program, earning his tan beret and Ranger Scroll.

Though the program is highly selective and results in only a few earning the chance to become a Ranger, it is still incredibly beneficial for all that complete it. The majority of the candidates are initial entry with very little exposure to the types of conditions they face in the program.

Even though some students do not receive a Ranger school opportunity, they walk away far better prepared to be leaders. Candidates come out knowing more about themselves mentally and physically, pushing past what they previously thought they could and more equipped to Lead the Way.



SBOLC Pre-Ranger Student Conducts the 12-mile ruck march. Photo by Lexi Thralls

Want to hear more about Signal Innovation?



The **75RR IT Innovators Podcast** educates signal and operational leaders about on-going tech innovations across the Regiment and within the DOD. This podcast provides the Regimental S6 with a medium to inform potential recruits about the cutting edge of communications innovation and to strengthen strategic relationships with external organizations that have similar modernization goals.

Interviews have been conducted with:

- -JSOC CTO: Snehal Antani
- -Director, Deputy Director, and Chief of Market Research for the Network – Cross Functional Team: MG Pete Gallagher, COL Rob Ryan, and CW5 Brian Westbrook
- -Director of the Enterprise Cloud Management Office: Paul Puckett
- -Cyber School Commandant/Chief of Cyber Branch: BG Paul Craft
- -Director of SOCOM SOF Digital Applications: COL Paul Weizer
- **-DARPA:** COL Allen Walker and Dr. Mary Schurgot



Click the icons to redirect to the podcast, or use the following links below:



https://podcasts.apple.com/us/podcast/75th-ranger-regiment-it-innovators-podcast/

id153411659

Q&A with Staff Sgt. Stevin Johnson

Staff Sgt. Stevin Johnson is one of the 75th Ranger Recruiting Detachment Liaisons to Fort Gordon. Last year, he and SGT Steven Noriega recruited over 230 candidates to attend RASP 1. Below he gives a brief window into the world of recruiting and training potential Army Rangers, answering the top three most asked questions he receives while recruiting.

Do I need an option 40 contract to attend RASP 1?

I'd be willing to say at least 70% of the Rangers within Regiment were RASP volunteers, including myself. It units. While these are all true, what took quite a bit of groundwork, but we stood out to me were the people. I have made the process to volunteer simpler than ever. Any Signal AIT Soldier that meets GT score and sepending UCMJ action, can volunteer for RASP assignment with one form. However, once that same Soldier reaches their first assignment, the process is not as easy. At that point, vou will need letters of recommendation, command signatures including the first O-6 in your chain of command, letters of intent, and meet PT requirements, all after you have waited 10-12 months before becoming eligible. It's difficult for Soldiers in crit- right unit for me? ical job specialties or fenced units to get a signed 4187 of release from their unit.

What separates Regiment from a conventional Army unit?

There is a common misconception

that our cutting-edge equipment, weapons, or necessary funding to work initiatives are what separates the Ranger Regiment from other spent my first seven years of service with a FORSCOM unit. It is an entirely different environment being in an curity clearance requirements with no all-volunteer unit with rigorous standards. I enjoy being surrounded by individuals whose mindset desires to always exceed the standard, be the most knowledgeable at their craft, give one-hundred percent, and then some. In my six years at Ranger Regiment, I have never failed nor heard of my Ranger buddies failing a mission or task. Rangers get the job done by any means necessary!

How do I know if Regiment is the

The Ranger Regiment is not a job; it is a calling. I knew I wanted more in my conventional Army days but didn't know what more would be. Like most, I was comfortable with the daily grind. Here is an easy question: if

you begin to notice that you are more driven than the majority of your peers, your physical output is higher, then why would you not seek the challenge of a Special Operation Selection Course such as the Ranger Assessment and Selection Program? Many Soldiers will go years or their entire careers with the potential and qualifications to serve in an elite unit, but they limit themselves because of doubt or fear of the unknown. There is never a better time to volunteer for RASP than while at your AIT location.



Staff Sgt. Stevin Johnson gives Land-Nav POI to RASP volunteers at Fort Gordon. Photo provided by Staff Sgt. Stevin Johnson

Interested in serving as a Communicator in the 75th Ranger Regiment?

Cpt. William Rowcliffe & Cpt. Matthew DePuydt 75th Ranger Regiment

The Regimental Commander's number one priority is the WAR FOR TALENT, to recruit and train the best and brightest to fill the Ranger Regiment's ranks. In its search for competent, qualified junior enlisted soldiers, noncommissioned officers, officers, and warrant officers, the Ranger Regiment constantly assesses communicators. The 75th Ranger Regiment's enlisted communicators receive some of the most advanced training the U.S. Army offers. For junior enlisted communicators who have an Option 40 contract or volunteer upon arrival to Fort Gordon, their path leads to Fort Benning, GA to complete the Ranger Assessment and Selection Program 1 (RASP 1). At RASP 1, candidates are trained and assessed under the Regiment's finest Non-Commissioned Officers' careful supervision.

RASP 1 is 8-weeks long, rigorous, and grueling. During this time, Ranger candidates' progress is tracked by the RS6 staff, and coordination is made for their eventual assignment within the Regiment. Upon graduation from RASP 1, candidates will attend the Basic Airborne Course, hands-on tactical communications training, and CompTIA's Networking and Cybersecurity courses. Additionally, newly selected Rangers will participate in Project Galahad and Phalanx courses that provide brandnew enlisted Ranger Communicators with crucial lifeadvice through briefs and discussion before they reach their gaining Battalions. Ranger School attendance is expected of all soldiers in the 75th, and Regiment's communicators are no exception. Most junior enlisted Soldiers arrive at their gaining Battalion and spend 6-12



Rangers Prepare for an Airborne Jump. Photo by 75th Ranger Regiment Public Affairs

months receiving on-the-job training and a deployment before attending Ranger School. Through the Battalion training cycles, they are trained in numerous SATCOM terminals, network devices, on-the-move communications equipment.

RASP 2 is those in the grade of E5(P) and above that apply and have had their applications accepted. RASP 2 is a three-week selection course for senior noncommis-

sioned officers, officers, and warrant officers. Candidates are tested on their physical and mental capabilities while learning the special tactics, techniques, leadership, and procedures that set the Regiment apart. Final evaluations of candidates take place before a board of experienced Enlisted and Commissioned Rangers.

Ranger NCOs are among the most experienced in the Army. They have multiple combat deployments and intense training experience. Their expertise and leadership are critical in planning and executing combat operations. NCOs also prepare junior enlisted Rangers for combat by emphasizing discipline and training. They have extensive schooling with a broad background of conventional to special operations experience. NCOs ensure continued mission success and offer unique expertise for assignments in other Army units. Rangers have the time and resources to acquire additional cybersecurity and networking certifications to further their professional development, all paid for by the 75th Ranger Regiment.

Ranger Warrant Officers provide technical expertise to commanders and staff's facilitating mutual Army and SOF-specific requirements to Rangers. Their experience, knowledge, and training provide crucial links that help synchronize critical functions and operations in the Ranger Regiment.

Ranger Signal Officers bring exceptional leadership, operational expertise, and experience to the unit. They possess a variety of experience in conventional and special operations units and have extensive special skills training. Many fill roles as secondtime platoon leaders in the Regimental Communications Company, as BN S6's, or as Task Force J6's while deployed.

RANGER VOLUNTEERS MUST MEET THE FOLLOWING RE-QUIREMENTS:

- US CITIZEN
- ACTIVE DUTY US ARMY
- GT SCORE OF 105 OR HIGHER*
- ELIGIBLE TO OBTAIN A SECRET CLEARANCE
- AIRBORNE QUALIFIED (OR WILLING TO ATTEND)
- PASS PHYSICAL REQUIREMENTS
- *GT SCORE APPLIES TO ENLISTED APPLICANTS ONLY, WAIV-ERABLE TO 90 ON A CASE-BY-CASE BASIS

RANGER PHYSICAL REQUIREMENTS:

Ranger Fitness Test

- 58 Push ups
- 69 SITUPS
- 5 mile run in 40:00 or less
- 6 chin ups
- 12 mile ruck march with 35 lbs ruck and weapon

HOW TO APPLY:

OFFICER: LOG ON TO **AIM**, CLICK THE MY INFORMATION TAB, CLICK (+) NEW REQUEST, AND SUBMIT A REQUEST FOR THE 75TH RANGER REGIMENT.

ENLISTED: SEND YOUR SRB TO **75RECRUIT@SOCOM.MIL**FROM A .MIL ACCOUNT WITH A BRIEF SUMMARY OF WHAT YOU WANT TO DO IN THE 75TH RANGER REGIMENT.

IN AIT: GET WITH YOUR DRILL SERGEANT OR REACH OUT TO US ON INSTAGRAM

@75TH_RANGER_RECRUITING AND ASK FOR A VOLUNTEER STATEMENT FOR RASP.

NOT IN THE ARMY: GET IN TOUCH WITH YOUR LOCAL RECRUITER AND ASK ABOUT AN OPTION 40 CONTRACT. IF NO OPTION 40 CONTRACTS ARE AVAILABLE, YOU CAN VOLUNTEER AT AIT IF YOU MEET THE REQUIREMENTS ABOVE.

